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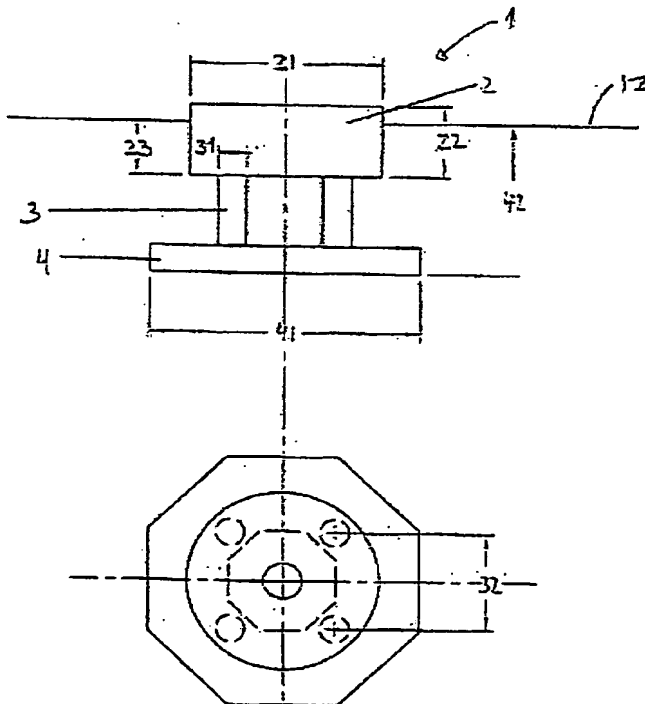
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(54) Title: **FLOATING STRUCTURE**



(57) Abstract: The present invention relates to a floating loading buoy (1) comprising a surface element (2), columns (3) connecting the surface element (2) to a submerged pontoon element (4), mooring devices (5) for securing the loading buoy (1) to the seabed (6), at least one attachment point (7) for transfer pipelines (8) from a production/processing/storage unit (9) to the loading buoy (1), mooring and transfer devices (10) for transferring fluid from the loading buoy (1) to a loading/unloading vessel (11). The surface element (2) is arranged floating in the water plane surface (12) and has a substantially rounded cross section in a substantially horizontal plane and a draught in the body of water, the columns (3) extend from the surface element (2) down to the pontoon element (4), which in a substantially horizontal plane has a substantially rounded external perimeter and a draught in the body of water. The proportion of the volume of the pontoon element (4) divided by the waterline area of the surface element (2) is in the range 4-7m, and preferably approximately 6m, and the draught of the surface element (2) divided by the draught of the pontoon element (4) is in the range 0.31-0.43 and where the vertical mooring rigidity for the loading buoy (1) is over 50% of the waterline rigidity for the loading buoy (1).

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